

DATA CONVERTER WITH BACKGROUND AUTO-ZEROING VIA ACTIVE INTERPOLA- TION

Abstract

An analog-to-digital data converter converts an input signal to corresponding digital signals. The data converter includes two sets of comparison units arranged in an interlaced sense to alternatively analyze the input signal, generate digital signals corresponding to the result of comparing the input signal and reference signals. Each of the comparison units has a positive output and a negative output, and the digital signal is generated by the negative output and the positive output of the comparison units in a differential way. When the comparison units of one set are performing auto-zeroing, the comparison units of the other set perform the data conversion to generate corresponding digital signals.